The effectiveness of social work with older people and their families: A meta-analysis of conference proceedings

Amanda M. Grenier and Kevin M. Gorey

A recent meta-analysis of 88 published studies evaluating social work interventions found them to be effective (Gorey, 1996). This research concluded that nearly eight of every 10 clients (78 percent) who engaged social work services did better than the typical nonparticipating client. This index of social work’s average intervention effect size was estimated to be significant in both a statistical and practical clinical or policy sense. Moreover, Gorey’s meta-analysis of the extant social work research literature of the 1990s essentially replicated the overall findings of similar reviews from the 1970s and 1980s (Reid & Hanrahan, 1982; Rubin, 1985; Thomlison, 1984; Videka-Sherman, 1988).

The consistent inference has been that social work services are helpful (that is, that they significantly ameliorate, alleviate, or solve the client- and worker-identified problem) to the vast majority of people who use them. There is a plausible alternative explanation for the touted effectiveness of social work, though, and that is that because the meta-inferences of Gorey and others were primarily based on the summarization of published research, it may be that their overall positive findings are solely explainable by the tendency for peer-reviewed journals to print “significant” or nonnull findings. This potential “file drawer problem” (Rosenthal, 1979), or publication bias, has not yet been adequately accounted for in reviews of the research on the effectiveness of social work practice. The present meta-analysis of conceptually similar, although unpublished, social work research findings will do so. Also, by focusing on gerontological practice, it will integratively review a field of social work that has not previously been so summarized.

We are aware of only one study on the potential potency of publication bias among the social work research literature (de Smidt & Gorey, 1997). In fact, de Smidt and Gorey’s meta-analysis of unpublished graduate student research (dissertations and theses) suggested that publication bias could probably be rejected as a salient alternative explanation for social work’s observed effectiveness. However, although direct evidence is not available on this score, one may conjecture that some (and perhaps many) of the student authors who formed their “unpublished” sampling frame, particularly those hoping to become academics, may already have been experiencing “publish or perish” pressure. If so, there may be a greater tendency among them to report “significant” results that may be more “publishable” later, during their early academic careers, in peer-reviewed journals. The meta-analysis reported in this article sought to empirically clarify this question by systematically replicating a recent review of published research on the effectiveness of social work (Gorey, 1996) and a similar review of dissertations and theses (de Smidt & Gorey, 1997) using another source of unpublished research, conference proceedings.

METHOD
Recent (1990 to 1996) conference presentations from the annual scientific meetings of the
Gerontological Society of America (GSA) that reported empirical findings on the effectiveness of gerontological social work (work with older people and their families) were this review's sampling frame. This largest of the field's annual professional conferences accepted manuscript abstracts at a rate of 88 percent in 1996; none were disqualified simply on the basis of nonsignificant findings, and acceptance rates for the years 1990 to 1995 were reported to be similar to the 1996 rate (personal communication with S. E. Gordon, GSA Director of Conferences, July 22, 1996). Forty-two conference proceedings were selected from Volumes 30 (1990) to 36 (1996) of The Gerontologist (see Sample Presentations list following the References). The sample of studies for meta-analysis comprises the abstracts of these presentations. This meta-analysis exactly replicated Gorey’s (1996) previous analysis based on published research in its use of the subject key word search scheme and the calculation of a scale-free effect size metric, the r index (interpretable as Pearson’s r), for each study as well as its summarization across the 42 studies (Cooper, 1989; Light & Pillemer, 1984). Abstracts affiliated with schools of social work or social welfare that met these criteria were included, as well as other multidisciplinary ones in which social workers were involved in theory development or service delivery.

**RESULTS**

**Sample Description**

The 42 conference proceedings typically (86 percent) had samples of fewer than 200 client participants (median = 89; combined intervention and comparison groups ranged widely from one to 14,000). All except one Canadian study were carried out in the United States. They also all, except one single-system design, used group research designs to evaluate direct, face-to-face interventions with individuals (34 percent), small groups (49 percent), or families (17 percent). Study designs included pre- (one group posttest, 42 percent), quasi- (comparison group, 34 percent), and true experiments (randomized control group, 24 percent).

These unpublished studies were similar to their published counterparts (Gorey, 1996) in all of these descriptive characteristics except one. The studies reported at the annual GSA meetings were less likely than their published counterparts to have evaluated organizational or community practice (where the units of analyses were larger than individuals—for example, programs or communities; none versus 27 percent, respectively) [χ²(1, N = 130) = 14.16, p < .01]. This variable was not, however, found to be associated with intervention effect size among the previously reviewed published studies, so by definition (for a third variable to confound a bivariate relationship it must minimally be associated with both of them) it cannot confound this study’s unpublished–published effect size comparison.

**Effectiveness of Gerontological Social Work Interventions**

In combining the results of the 42 conference proceedings, our review essentially replicated the general effectiveness of social work interventions found by the previous review of published social work research; we found a mean r index of .240 (95 percent confidence interval [CI] of .163, .317) (Table 1). Conversion to Cohen’s (1988) $U_{50}$—a statistic that compares all of an intervention group’s outcome measure scores with a

<table>
<thead>
<tr>
<th>Effect Size Statistic</th>
<th>Conference Proceedings</th>
<th>All</th>
<th>Published Gerontological</th>
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</thead>
<tbody>
<tr>
<td>Studies (n)</td>
<td>42</td>
<td>88</td>
<td>20</td>
</tr>
<tr>
<td>Minimum r</td>
<td>.000</td>
<td>-.380</td>
<td>.020</td>
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<tr>
<td>Maximum r</td>
<td>.997</td>
<td>.962</td>
<td>.941</td>
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<tr>
<td>Mean r</td>
<td>.240</td>
<td>.356</td>
<td>.345</td>
</tr>
<tr>
<td>SD</td>
<td>.253</td>
<td>.261</td>
<td>.239</td>
</tr>
<tr>
<td>r (95 percent CI)</td>
<td>.163, .317</td>
<td>.302, .411</td>
<td>.240, .450</td>
</tr>
<tr>
<td>Cohen’s $U_{50}$</td>
<td>68.9%</td>
<td>77.7%</td>
<td>76.9%</td>
</tr>
</tbody>
</table>

NOTE: CI = confidence interval. Conference proceedings versus all published studies [r(128) = 2.42, p < .05] or versus published gerontological studies [r(60) = 1.59, p < .10], both one-tailed.

*Sample included studies of social work with older people themselves (25 studies, 60 percent), with caregivers (13 studies, 31 percent), and simultaneously with both (four studies, 9 percent). The majority of the therapeutic interventions with elders and supportive ones with caregivers were based on generalist, systemic, or task-centered frameworks (57 percent); the remainder were cognitive or behavioral theory based. Specific intervention methods ranged widely from less formal individual life review or supportive group work to more structured methods such as cognitive–behavioral group work or task-centered case management. Effect size was not found to differ significantly by these client or treatment factors.

*Adapted from Gorey (1996).
comparison group median score—allows for the inference that about two-thirds (69 percent) of the older clients or their caregiving family members who participated in an intervention did better than the average client in a comparison group.

Not surprisingly, this review of conference proceedings produced a somewhat smaller (10 percent attenuation) average effect size (69 percent) than the one based on all of the published studies (78 percent) or the specifically gerontological ones (77 percent). However, although the overall unpublished-published between-group comparison was statistically significant \( (p < .05) \), the meta-analytic comparison of unpublished and published research on the effectiveness of gerontological social work only approached significance \( (p < .10) \). Both similarly infer gerontological social work’s intervention effectiveness (70 percent to 75 percent positive change associated with the intervention); both had \( ps \) of less than .05 (combined probability; 95 percent CIs did not include the null). Publication bias does not seem to saliently confound the generally positive inferences of social work effectiveness that have arisen from the profession’s peer-reviewed publications.

**DISCUSSION**

Recently available unpublished research on social work intervention (1990 to 1996) provides the basis for generally inferring its effectiveness. On the basis of 42 studies presented at the GSA’s annual scientific meetings, 69 percent of older clients or their caregivers participating in an intervention do better than the average client in a comparison group. Moreover, this overall finding closely replicates that of a recent meta-analysis of the published research on the effectiveness of social work (Gorey, 1996), as well as another based on unpublished dissertations and theses (de Smidt & Gorey, 1997).

In a sense, the present article is an extension of these previous ones. Taken together, they demonstrate in a quite unequivocal fashion that publication bias does not potently confound the generally positive inferences about social work’s effectiveness that have been reported in peer-reviewed publications. Social workers can be confident in the validity of the notion that their services, and in this instance gerontological social work services, are practically helpful to seven to eight of every 10 clients who use them. This consistent conclusion is not explainable merely by the tendency of social work journals to report positive findings.

Taken together, this series of meta-analyses, which summarize the findings of more than 150 studies on the effectiveness of social work interventions in the 1990s, converge on the strong inference that such work is helpful for most clients who engage in it. But what of those for whom social work services are ineffective, an estimated two of every 10 social work clients? Answers to questions about their specific needs and the provision of effective services to them ought to be the mission of the next generation of social work research (de Smidt & Gorey, 1997). Social workers need to extend the population and contextual validity of their professional knowledge base. Having favorably answered the question of social work’s overall effectiveness, it is now time to learn how the effects of specific interventions are moderated by specific client, worker, intervention, and other situational characteristics.

**Potential Limitation of Conference Proceedings as “Unpublished” Research**

It should be noted that even though studies presented at a conference are clearly categorically definable as unpublished at the time of their presentation, they may subsequently be published in the profession’s journals or elsewhere. To the extent to which this review’s sample of proceedings has thus penetrated the professional literature, its hypothesized independent variable (unpublished versus published) will misclassify studies. Such misclassification bias does not potently confound this review’s central finding for the following reasons. First, at the time of this writing, computer searches of Social Work Abstracts, Psychological Abstracts, Sociological Abstracts, Nursing Abstracts, and Index Medicus revealed that although eight (19 percent) of the conference presentations were subsequently published (Feather, 1993; Fishback & Lovett, 1992; Gottesman, Peskin, Kennedy, & Mossey, 1991; Hebert, Leclerc, Bravo, Girouard, & Lefrancois, 1994; Kemp, Corrigal, & Gill, 1992; Rodman, Gantz, Schneider, & Gallagher-Thompson, 1991; Smith, Tobin, & Toseland, 1992; Toseland, Labrecque, Goebel, & Whitney, 1992), support for the criterion validity of this review’s unpublished–published operational definition remained \( \{ r = .86, \text{converted from } \chi^2(1, N = 130) = 96.29, p < .01 \} \) \( (34 \text{ of } 42 \text{ unpublished versus none of } 88, \text{Gorey, 1996}; \{ r = \chi^2/n\}^{1/2}, \text{Cooper, 1989}) \). Second, exclusion of these eight subsequently published presentations did not result in substantively different meta-analytic inferences. Finally,
neither did exclusion of the 15 conference presentations from 1995 or 1996 (those most likely to presently be in review or in press). So we are confident that this review validly sampled unpublished social work research.

REFERENCES


SAMPLE PRESENTATIONS

All abstracts of papers presented at the annual scientific meetings of the Gerontological Society of America are published in The Gerontologist.


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